7062272180

AVIGENICS

PAGE 04

Appl. No. 10/696,671
Reply to Final Office Action mailed October 30, 2007 and Advisory Action mailed January 17, 2008

## Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

## Listing of Claims:

1-19 (canceled).

20 (currently amended). A germ-line transgenic chicken whose genome contains a transgene introduced by a replication-deficient retroviral vector avian which lays an egg containing an exogenous protein encoded by a the transgene present in the germ-line of the transgenic avian wherein the exogenous protein is produced in the transgenic chicken avian oviduct at a detectable level.

21-30 (canceled).

31 (currently amended). A transgenic chicken whose genome contains a transgene introduced by a replication-deficient retroviral vector avian which lays an egg containing a pharmaceutical protein encoded by a the transgene present in the germ line of the transgenic avian wherein the exegenous pharmaceutical protein is produced in the transgenic chicken avian oviduct at a detectable level wherein and the pharmaceutical protein is exogenous to the egg.

32 (canceled)

33 (currently amended). The transgenic chicken avian of claim 31 wherein the pharmaceutical protein is present in egg white of the egg laid by the transgenic chicken avian.

34 (currently amended). A germ-line transgenic chicken whose genome contains a transgene introduced by a replication-deficient retroviral vector avian which lays an egg containing egg white comprising a protein exogenous to the egg white, wherein the protein exogenous to the egg white is encoded by a the transgene present in the germline of the transgenie avian and wherein the exogenous protein is produced in the transgenic chicken avian oviduct at a detectable level.

Reply to Final Office Action mailed October 30, 2007 and Advisory Action mailed January 17, 2008

35-36 (canceled).

37 (currently amended). The germ-line transgenic chicken avian of claim 34 wherein the protein is selected from the group consisting of interferon, G-CSF, erythropoietin, GM-CSF, antitrypsin, antithrombin III, collagen, factors VIII, IX, X, fibrinogen, insulin, protein C, tissue-type plasminogen activator, somatotrophin, cytokine, antibody, human growth hormone, immunotoxin and chymotrypsin.

38-40 (canceled).

41 (currently amended). A transgenic <u>chicken whose genome contains a transgene introduced by a replication-deficient retroviral vector avian</u> which lays an egg containing a cytokine encoded by a the transgene present in the germline of the avian wherein the cytokine is produced in the transgenic <u>chicken</u> avian oviduct at a detectable level and is exogenous to the <u>chicken</u> avian.

42-45 (canceled).

46 (currently amended). The transgenic chicken avian of claim 41 wherein the cytokine is interferon.

47-49 (canceled).

52 (currently amended). The transgenic <u>chicken</u> avian of claim 41 wherein the cytokine is GM-CSF.

53 (currently amended). The transgenic chicken avian of claim 41 wherein the cytokine is G-CSF.

54 (currently amended). The transgenic <u>chicken</u> avian of claim 41 wherein the cytokine is erythropoietin.

Reply to Final Office Action mailed October 30, 2007 and Advisory Action mailed January 17, 2008

- 55-58 (canceled).
- 59 (currently amended). A method comprising purifying an exogenous protein from an egg of a transgenic chicken whose genome contains a transgene introduced by a replication-deficient retroviral vector avian which lays the egg containing the exogenous protein at a detectable level wherein the exogenous protein is encoded by a the transgene present in the germline of the avian.
- 60-61 (canceled).
- 62 (previously presented). The method of claim 59 wherein the exogenous protein is interferon.
- 63 (previously presented). The method of claim 59 wherein the exogenous protein is G-CSF.
- 64 (previously presented). The method of claim 59 wherein the exogenous protein is erythropoietin.
- 65 (new). The method of claim 59 wherein the exogenous protein is GM-CSF.
- 66 (new). The method of claim 59 wherein the exogenous protein is antitrypsin.
- 67 (new). The method of claim 59 wherein the exogenous protein is antithrombin III.
- 68 (new). The method of claim 59 wherein the exogenous protein is collagen.
- 69 (new). The method of claim 59 wherein the exogenous protein is selected from the group consisting of factor VIII, factor IX and factor X.
- 70 (new). The method of claim 59 wherein the exogenous protein is fibrinogen.

Reply to Final Office Action mailed October 30, 2007 and Advisory Action mailed January 17, 2008

- 71 (new). The method of claim 59 wherein the exogenous protein is insulin.
- 72 (new). The method of claim 59 wherein the exogenous protein is lactoferrin.
- 73 (new). The method of claim 59 wherein the exogenous protein is protein C.
- 74 (new). The method of claim 59 wherein the exogenous protein is tissue-type plasminogen activator.
- 75 (new). The method of claim 59 wherein the exogenous protein is somatotrophin.
- . 76 (new). The method of claim 59 wherein the exogenous protein is a cytokine.
- 77 (new). The method of claim 59 wherein the exogenous protein is an antibody.
- 78 (new). The method of claim 59 wherein the exogenous protein is human growth hormone.
- 79 (new). The method of claim 59 wherein the exogenous protein is an immunotoxin.
- 80 (new). The method of claim 59 wherein the exogenous protein is chymotrypsin.
- 81 (new). The germ-line transgenic chicken of claim 20 wherein the exogenous protein is erythropoietin.
- 82 (new). The germ-line transgenic chicken of claim 20 wherein the exogenous protein is G-CSF.
- 83 (new). The germ-line transgenic chicken of claim 20 wherein the exogenous protein is interferon.

Appl. No. 10/696,671 Reply to Final Office Action mailed October 30, 2007 and Advisory Action mailed January 17, 2008

- 84 (new). The germ-line transgenic chicken of claim 20 wherein the exogenous protein is GM-CSF.
- 85 (new). The germ-line transgenic chicken of claim 20 wherein the exogenous protein is antitrypsin.
- 86 (new). The germ-line transgenic chicken of claim 20 wherein the exogenous protein is antithrombin III.
- 87 (new). The germ-line transgenic chicken of claim 20 wherein the exogenous protein is collagen.
- 88 (new). The germ-line transgenic chicken of claim 20 wherein the exogenous protein is selected from the group consisting of factor VIII, factor IX and factor X.
- 89 (new). The germ-line transgenic chicken of claim 20 wherein the exogenous protein is fibringen.
- 90 (new). The germ-line transgenic chicken of claim 20 wherein the exogenous protein is insulin.
- 91 (new). The germ-line transgenic chicken of claim 20 wherein the exogenous protein is lactoferrin.
- 92 (new). The germ-line transgenic chicken of claim 20 wherein the exogenous protein is protein C.
- 93 (new). The germ-line transgenic chicken of claim 20 wherein the exogenous protein is tissue-type plasminogen activator.

Reply to Final Office Action mailed October 30, 2007 and Advisory Action mailed January 17, 2008

94 (new). The germ-line transgenic chicken of claim 20 wherein the exogenous protein is somatotrophin.

95 (new). The germ-line transgenic chicken of claim 20 wherein the exogenous protein is an antibody.

96 (new). The germ-line transgenic chicken of claim 20 wherein the exogenous protein is human growth hormone.

97 (new). The germ-line transgenic chicken of claim 20 wherein the exogenous protein is an immunotoxin.

98 (new). The germ-line transgenic chicken of claim 20 wherein the exogenous protein is chymotrypsin.